JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -1 EXAMINATION- 2026
B.Tech-VIII Semester (BT)

COURSE CODE (CREDITS):21B1WBT831(03) MAX. MARKS: 15
COURSE NAME: Food Processing and Engineering
COURSE INSTRUCTOR:Dr Anil Kant, Dr Ashok Nadda MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory. (b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems (c) Use of calculators is not allowed.*

Q.No	Question	CO	Marks
Q.1	a. Defend with at least one discrete reason a) Sugar above 30% prevents microbial growth? b) Oil layer in pickles prevent spoilage c) High salt in preserved vegetables/pickles act as preservative? b. Discuss why food engineering is considered a distinct discipline from chemical engineering? c. Mention four reasons why food processing is important for mankind. d. What is blanching? Write any four objectives of blanching unit operation in processing fruits and vegetables.	I	4
Q.2	a. Compare the homofermentative and heterofermentative Lactic acid bacteria (LAB) in terms of end products and applications in the food industry. b. Why does alcoholic fermentation release carbon dioxide?What factors determine whether fermentation will be alcoholic or non-alcoholic?	II	5
Q.3	a. Explain the principle of freezing preservation. Compare conventional freezing with Individual Quick Freezing (IQF) in terms of quality, time, and commercial advantages. b. Recognize the steps to carry out freezing of fruits or vegetables and explain how different types of packs can be prepared. Implement the same to outline the process for one of the fruits or vegetables of your choice.	II	5

25